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William G. Bowen and Sarah A. Levin: Reclaiming the Game

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CHAPTER 1

Introduction

In no other country in the world is athletics so embedded within the institutional structure of higher education as in the United States. This is true at all levels of play, from the highly publicized big-time programs that compete under the Division I banner of the National Collegiate Athletic Association (NCAA) to small college programs that are of interest primarily to their own campus and alumni/ae communities. But to many sports fans, "serious" college sports are thought of almost exclusively in terms of Division I competition between highly skilled teams composed of students holding athletic scholarships. It is no surprise, therefore, that the ranking of the best and worst college sports programs introduced by *U.S. News & World Report* is concerned, at least in the first instance, only with play at this level.[1]

However, as both university presidents and readers of the sports pages know well, the public exposure these programs receive is not always positive: the extensive reporting of events such as the resurgence of Notre Dame football, the bowl championship series, and basketball's "March Madness" is regularly accompanied by commentary on the "dark side" of big-time sports.[2] In 2001 the Knight Commission published a second report calling for reform of Division I sports in stronger terms than ever before,[3] and a week does not pass without one or more stories detailing some new recruiting scandal or lapse in academic standards, debating gender equity issues, commenting on rowdy behavior by athletes and other students, or speculating on the future course of the NCAA.

The academic downside of big-time sports has been recognized for a very long time—indeed, for at least a century.[4] The generally unstated—or at least untested—assumption has been that all is well at colleges and universities that provide no athletic scholarships and treat college sports as a part of campus life, not as mass entertainment. The positive contribution of athletics in these contexts is emphasized on the sports pages of student newspapers, alumni/ae magazines, and official publications, which, taken together, provide a generally healthy corrective to a societal tendency to emphasize problems.[5] The director of athletics and physical education at Bryn Mawr, Amy Campbell, surely spoke for many dedicated coaches and administrators at such schools when she wrote: "College athletics is a prized endeavor and one that en-

riches the experience of college students. The question should not be 'at what price athletics' but rather how to structure athletic programs that serve both the student athletic interest and the greater goals of liberal arts institutions."[6]

We identify strongly with this pro-sports mindset and cannot imagine American college life without intercollegiate teams, playing fields, and vigorous intramural as well as recreational sports programs. But we are concerned that all is not well with athletic programs at many colleges and universities outside the orbit of big-time sports. One of our principal concerns is that widely publicized excesses and more subtle issues of balance and emphasis may undermine what many of us see as the beneficial impact of athletics. "Save us from our friends" is an old adage, and it has real applicability here. Zealous efforts to "improve programs," boost won-lost records, and gain national prominence can have untoward effects that may erode the very values that athletic programs exist to promote—as well as the educational values that should be central to any college or university. From our perspective, the challenge is to strengthen, not weaken, the contribution that athletics makes to the overall educational experience of students and to the sense of "community" that is important not only to current students but also to graduates, faculty members, staff, and others who enjoy following college sports.

THIS BOOK—AND HOW IT DIFFERS FROM *THE GAME OF LIFE*

A principal thesis of this study is that there is an urgent need to recognize that the traditional values of college sports are threatened by the emergence of a growing "divide" between intercollegiate athletics and the academic missions of many institutions that are free of the special problems of "big-time" sports. Until recently, this problem was largely unrecognized. Readers (and reviewers) were very surprised by the evidence in our previous study, *The Game of Life,* that documented a persistent and widening split between academics and athletics at selective colleges and universities that offer no athletic scholarships, do not compete at the Division IA level, and presumably exemplify the "amateur" ideal.[7]

This new book is a direct response to requests by presidents of colleges and universities (and other interested parties) that we address a number of questions raised but not answered by *The Game of Life.*[8] Many observers of the educational scene (including those of us who conducted the original study) were taken aback by the degree to which athletes at Ivy League universities and highly selective liberal arts colleges have underperformed academically, by which we mean that they have done less well academically than they would have been expected to do on the basis of their incoming

academic credentials. (A box with definitions of frequently used terms, including *underperformance,* is provided later in this section.) To be sure, there were suspicions that increasing specialization in athletics, more intensive recruitment, and growing pressures to compete successfully in the postseason as well as during the regular season (combined with rising academic standards in general) were taking a toll on the academic performance of these athletes relative to that of their classmates. But no one could be sure this was true because no systematic data existed. The need to "find the facts" is what motivated the first study; the need to find more of the facts, and to understand them better, is what motivated this follow-up study.[9]

In seeking to fill in gaps that *The Game of Life* left open, *Reclaiming the Game* has several distinctive features.

First, the coverage of schools is both more inclusive and more focused. This study includes all 8 of the Ivy League universities and all 11 members of the New England Small College Athletic Conference (NESCAC); it also includes more universities in the University Athletic Association (UAA), an association of leading urban universities, and more liberal arts colleges outside the East.[10] At the same time, it does not present new data for the Division IA private and public universities such as Stanford and Michigan that were part of the original study. The issues facing the big-time programs, although similar in some respects to the issues we are discussing here, are so different in other respects that it did not seem sensible to tackle both sets of questions in the same study.

Second, this book contains data for a much more recent class (the putative class of 1999, which entered college in the fall of 1995). This updating allows us to answer the important question of whether the increasing and spreading academic underperformance among athletes noted in *The Game of Life* had reached a peak at the time of the 1989 entering cohort (the most recent entering cohort included in that study) or whether this disturbing trend has continued.

Third, and perhaps most important, this new study incorporates an important methodological innovation: we are now able, as we were not in *The Game of Life,* to distinguish *recruited athletes* (those who were on coaches' lists presented to admissions deans) from all other athletes (whom we call "walk-ons"). Thus we can deal directly with the extent to which it is the recruitment/admissions nexus that has created the academic-athletic divide. A pivotal question, which no one has been able to answer to date because the data did not exist, is to what extent *recruited* athletes perform differently, relative to their formal academic credentials, than other students—including walk-on athletes.

Fourth, in this study we probe much more deeply the causes of academic underperformance by athletes; in our view, this systematic underperformance is the most troubling aspect of the academic-athletic divide.

Colleges and Universities Included in the Study:

Ivy League universities
Brown University
Columbia University
Cornell University
Dartmouth College
Harvard University
Princeton University
University of Pennsylvania
Yale University

UAA universities
Carnegie Mellon University
Emory University
University of Chicago
Washington University in St. Louis

Women's colleges
Bryn Mawr College
Smith College
Wellesley College

NESCAC colleges
Amherst College
Bates College
Bowdoin College
Colby College
Connecticut College
Hamilton College
Middlebury College
Trinity College
Tufts University
Wesleyan University
Williams College

Coed liberal arts colleges (other)
Carleton College
Denison University
Kenyon College
Macalester College
Oberlin College
Pomona College
Swarthmore College

Key questions include: Are problems of academic performance concentrated at the bottom of the SAT distribution, or do they extend more broadly? How do recruited athletes fare if they stop playing intercollegiate sports? How much attrition is there, and how does it correlate with performance? How did recruited athletes and walk-ons perform academically in years when they were *not* playing—as compared with how they did in years when they were competing?

Fifth, in this study we present a far more "textured" explanation of processes such as recruitment and the role of coaches. Through conducting interviews, commissioning papers by athletic directors, and reviewing internal self-studies at specific colleges we have been able to gain a more nuanced understanding of both the dynamics of the present-day process of building intercollegiate teams, including the forces responsible for the steady widening of the athletic divide, and the consequences of the athletic divide.

Sixth, this study is more prescriptive than its predecessor: we include an extended discussion of why we regard the present "divide" as unacceptable from the standpoint of educational values, the kinds of reform efforts at both conference and national levels that seem to us especially promising, and the lessons about process and leadership that can be gleaned from recent experience. A frequent reaction to *The Game of Life* by college and university presidents, as well as by others, was: "All right. It is clear that there is a problem, but what are the main choices we have in considering what actions, if any, to take?" "What are the implications of just 'staying the course'?" "Is it possible to sustain—and even enhance—the positive value of college sports without paying a large academic price?"[11]

Frequently used terms:

Athlete:	Any student who was listed on the roster of an intercollegiate athletic team at any point in his or her college career.
Student at large:	Any student who was *not* listed on an athletic roster.
Recruited athlete:	A student who, as an applicant, was included on a coach's list submitted to the admissions office.
Walk-on athlete:	An intercollegiate athlete who was not included on the coach's list submitted to the admissions office.
High Profile sports:	Football, basketball, and men's ice hockey—the sports that have historically received the most attention at many of the schools in this study.
Lower Profile sports:	All men's sports other than the High Profile sports.
Admissions advantage:	The likelihood of admission for a recruited athlete (or another type of student) relative to the likelihood of admission for a student at large with the same credentials.
Underperformance:	The phenomenon of a group's having a lower GPA or rank-in-class than would be predicted on the basis of pre-college achievement and other observable characteristics.
Athletic divide:	The tendency for recruited athletes to differ systematically from students at large in academic credentials (such as SAT scores), in academic outcomes (such as majors chosen and rank-in-class), and in patterns of residential and social life; sometimes also referred to as the "academic-athletic divide."

HOW HAS ALL OF THIS BEEN ALLOWED TO HAPPEN?

The interest of college and university presidents in exploring a reform agenda leads directly to one of the questions we have been asked most frequently by commentators surprised by the present-day extent of the academic-athletic divide: "How has all of this been allowed to happen? Many of these colleges and universities have had excellent leadership, committed to educational values, and yet that leadership appears to have been able to do little to stop this drift. Why?"

Any full answer to this intriguing question would require an analysis of decision-making processes in colleges and universities that is well beyond the scope of this study. But we can hazard a few thoughts (which are discussed more fully in Chapter 13).

- Lack of data has been a huge problem. Until now there has been no systematic evidence to demonstrate that there is a serious academic-athletic divide or to allow anyone to understand the factors at work—such as the consequences of allowing coaches to play such a large role in identifying recruited athletes, who enjoy a substantial advantage in the admissions process. Absent data, one person's anecdote is as good as another person's.
- Because of the intensity of competitive pressures among schools, no one school can act alone. Collaboration is essential (and ideally collaboration that extends beyond a single conference or league), and it is notoriously difficult for college and university presidents and trustees who value institutional autonomy to act forcefully together. There is a reluctance to probe inside another institution, a desire to be "collegial," and a constant temptation to seek a kind of lowest-common-denominator consensus. There is also an endemic fear that change of any kind will give an untoward advantage to a traditional rival or lead to humiliation on the playing field.
- College and university presidents are very busy people, and yet it is difficult in this sensitive area to find anyone other than the president who can provide the leadership needed to bring about real change. This problem is compounded by the need to take a holistic approach to reform; past efforts have generally been limited to specific issues and referred to committees.
- Athletic establishments at both conference and national levels are very good at resisting change—and they have the incentives, the knowledge, and the time to be effective in pointing out the problems with any reform proposal, insisting on the need to "keep up with the Joneses" and, at a minimum, to maintain the status quo.
- Loud voices and the fear of unpleasant if not dangerous conflicts with key trustees and active alumni/ae can discourage "getting out

front." The fact that many faculty and alumni/ae favor "reclaiming the game" may count for relatively little in the political calculus involved in leading an institution.

- Inertia is a powerful force, and there are always more pressing problems. It is just easier to look the other way.

WHY STUDY ATHLETICS OUTSIDE DIVISION IA PROGRAMS?

We are also often asked why we have spent so much time and energy studying athletics at colleges such as Carleton, Colby, Kenyon, Macalester, Smith, Swarthmore, and Williams, as well as at universities such as Carnegie Mellon, Columbia, Dartmouth, Harvard, Princeton, the University of Chicago, Washington University in St. Louis, and Yale. The public at large is much more interested in what goes on at athletic powerhouses such as Duke, Maryland, Michigan, and Stanford than it is in the athletic programs of the schools in our study. And yet athletics and athletics programs have a far greater impact on the composition of the entering class (and perhaps on the campus ethos) at an Ivy League university or a small liberal arts college than at most Division IA universities. To many people, this was one of the most revealing findings of *The Game of Life*.

Whereas a large university can field many teams with only a tiny percentage of its students, a small liberal arts college or a university with a modest-sized undergraduate college cannot. The Ivies, the NESCAC schools, and the other small, academically rigorous liberal arts colleges, with their commitment to broad participation in athletics, often field more teams than a big-time Division IA university even though class size is much smaller. For example, the Ivies field an average of 31 teams and the NESCAC colleges field an average of 27, as contrasted with an average of 23 for a select set of Division IA universities (Duke, Northwestern, Rice, and Stanford). (See Figure 1.1.)

College athletes (defined throughout this study as students who, at one time or another during their college careers, have been on the roster of a team that has participated in intercollegiate competition) can easily comprise anywhere from 25 to 40 percent of the class at a Division III college and 20 to 30 percent of the class at an Ivy League university—as compared with under 5 percent of all undergraduates at a school such as the University of Michigan.[12] The percentage of athletes in any entering class depends, of course, on both the scale of the athletics program and the overall enrollment at the school. While the Ivies have by far the most athletes in their entering classes—183 men and 132 women on average in the 1995 entering class—they also have the largest entering classes, averaging nearly 1,500 students. The UAA universities such as the University

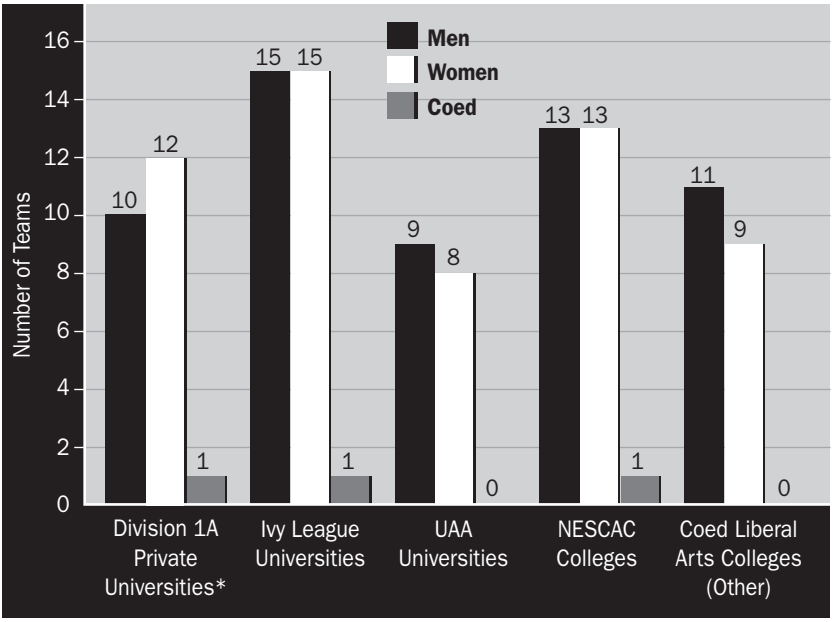

Figure 1.1. Numbers of Teams, by Gender and Conference, Academic Year 2001–02

Source: Individual school athletics Web sites.

*Division IA Private Universities included are Duke University, Northwestern University, Rice University, and Stanford University.

of Chicago and Washington University have undergraduate enrollments that are only slightly smaller, but they have much smaller intercollegiate athletics programs and thus appreciably lower percentages of athletes in an entering class (roughly 10 percent, on average). The real contrast is provided by the coed liberal arts colleges, and especially by those in NESCAC. They average only about 500 entering students each year, and yet they have more intercollegiate athletes—an average of 200 per class—than do many far larger universities. At NESCAC colleges such as Colby and Wesleyan, more than 40 percent of men play intercollegiate sports. (See Figure 1.2 for the percentages of athletes in the entering classes and Appendix Table 1.1 for class sizes.)

The decidedly above-average number of intercollegiate athletic participants in the Ivies and in the NESCAC colleges is consistent with the stated educational philosophies of these schools and is regarded as a mark of pride. (The differences between these schools and Division IA schools in numbers of athletes are even greater than the differences in numbers

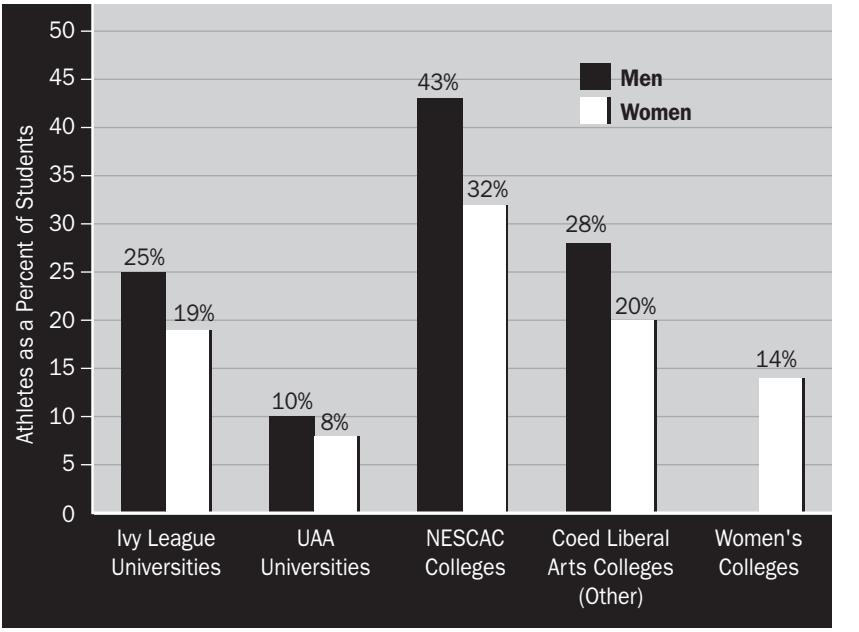

Figure 1.2. Athletes as a Percent of Students, by Gender and Conference, 1995 Entering Cohort

Source: Expanded College and Beyond database.

of teams, which indicates that typical squad sizes tend to be larger—a reflection of these schools' emphasis on broad participation in intercollegiate sports.) Surely one of the attractions of these excellent schools is that they offer the possibility of combining demanding academic programs with abundant opportunities to play on varsity teams. For this reason, the more strictly educational issues associated with college sports today affect extremely large percentages of students at the selective colleges and universities outside Division IA (though they are hardly absent at the more selective Division IA private universities such as Duke, Northwestern, Notre Dame, and Stanford).[13]

This study focuses on academically oriented colleges and universities outside the Division IA category for another reason. Some of the problems faced by the schools we are studying are, without doubt, similar to those faced by the big-time Division IA universities (e.g., academic underperformance by athletes), and the evolution of big-time athletic programs has stimulated some of the issues that now appear at the Division IAA (Ivy) and Division III levels.[14] Nonetheless, it is important to recog-

nize that the schools with big-time athletics programs face a host of other issues and pressures that are related to their use of athletic scholarships and to the array of commercial, political, and historical forces that swirl around them. Other commentators have elected to focus on these highly volatile issues, which require different kinds of specialized knowledge.[15]

One of the many ironies is that the evident problems of commercialization, low graduation rates, and blatant disrespect for academic values in many of the most visible big-time programs engender a false sense of comparative well-being, and therefore complacency, elsewhere. The "success-by-invidious-comparison" syndrome ("We can't be so bad; just look at what is going on over there") is a real problem.[16] To our way of thinking, each set of institutions needs to look hard at how its own athletics program is functioning in relation to its own mission, and to apply its own standards in evaluating these programs. Expectations should be different (higher, in our view) at academically rigorous colleges and universities that do not face the political pressures from governors and legislators to appear in bowl games and on national television.

There is also a greater possibility for constructive change at the institutions we are studying than there is for change at the schools with big-time programs that are driven so powerfully by commercial and political considerations. One factor inhibiting adjustments within Division IA is the complex and restrictive set of NCAA regulations (related to control of the massive television revenues from "March Madness," in particular) that make it difficult in the extreme for Division IA institutions to moderate their commitment to scholarship-driven, recruitment-intensive programs in even the least visible of the Lower Profile sports. As a practical matter, colleges and universities that operate outside the Division IA framework have much more opportunity to decide which schools they will play against in which sports, how much they will spend on athletics, how aggressively they will recruit talented athletes, what compromises they will make in terms of academic qualifications for admission, what they will expect of recruited athletes in the classroom, and how they will select and reward coaches. Finally, as we point out in Chapter 13, dollar signs point in exactly opposite directions: they encourage reform in the institutions we are studying at the same time that they are a major stumbling block to reform within Division IA.

It is important to recognize that, just as there are major differences between the schools in this study and Division IA schools, there are also substantial differences among the colleges and universities we study here. Although all of the liberal arts colleges and universities in our study place a high value on academic rigor, there is significant variation in the number of applications the schools receive and in the number of applicants they accept. As a result, topics such as the recruitment of athletes and ad-

missions advantages—in particular, the concept of "opportunity cost" discussed later—are more relevant to some institutions than to others. However, the major themes of this book are relevant, we believe, to *any college or university that places a high value on its academic mission and reputation.* The evolving characteristics of athletics programs and the present-day intensity of intercollegiate competition, including the pressures exerted by participation in postseason competition, have far-reaching effects on institutions that differ from each other in selectivity, geographical location, and many other respects.

ASSESSING THE EFFECTS OF ATHLETICS PROGRAMS

Colleges and universities are, at the end of the day, *academic* institutions. They are chartered to serve educational purposes, and surely the bottom-line test of how they do is their success in educating the young men and women whom they admit. To be sure, education takes many forms, and some of the most valuable learning experiences occur outside the classroom, laboratory, and library. But that hardly means that academic rigor and intellectual excitement are anything less than central to the academic enterprise. There should never be reason to apologize for looking closely at the academic performance of athletes who have been admitted to these highly selective institutions, for celebrating the achievements of those who have excelled academically, and for being disappointed when scarce places in an entering class are filled with students who seem not to appreciate fully the exceptional educational opportunities they have been given.

Places in the entering class are extremely valuable in the most selective colleges and universities, and the wise rationing of academic opportunity is a major challenge faced by all of them. Vivid testimony to the importance attached to admissions decisions is provided by the notes sent and phone calls made to these schools by hordes of disappointed applicants, parents, and guidance counselors. The weight attached to athletic talent in crafting a class demands urgent attention precisely because there are so many talented young people who want to attend the leading colleges and universities, including many who present exceptional qualifications outside of athletics that do not translate into anything like the same advantage in the admissions process. At these schools, the cost of admitting Jones is the inability to admit Smith, and this basic concept of "opportunity cost" (what an institution is giving up by following one path) is a central concept to which we will return throughout this study.

The performance of athletes in the classroom *relative* to the performance of their classmates (and, by inference, to the presumed performance

of more or less equally talented candidates who were denied admission on the margin of the admissions process) is one key benchmark in assessing the opportunity costs associated with intensive recruitment of athletes. This is why we attach special weight to what we call "academic underperformance." Comparisons of performance on an "other-things-equal" basis, holding constant factors such as SAT scores, high school grades, and socioeconomic background, are useful indicators of the extent to which students classified in one way or another are taking full advantage of the scarce educational opportunities that they have been given.[17]

As any teacher will attest, how well students perform academically depends on a host of factors, including their backgrounds, motivations, and priorities. Admissions officers are expected each year to make hard judgments not only concerning what a particular applicant is capable of doing, but of what the applicant is in fact likely to do—how hard the student will work, how adventuresome the student will be, with what zeal he or she will pursue a new subject, how much real pleasure the student will derive from making the extra effort required to turn a solid B into an A.[18] The ever more intensive recruitment of athletes enters the admissions equation at precisely this point.

The academic underperformance of athletes as a group is also relevant to another disturbing problem that has been called to our attention: the stigma that can be felt by an athlete at an academically selective college or university *even if the athlete in question is a dedicated student who performs as well in the classroom as on the playing field.* Results that hold for a group may not apply at all to particular individuals within the group. It is patently unfair to stereotype students, and every student should expect to be judged on his or her merits. But we know that stereotyping occurs and surely exacerbates the academic-athletic divide. Stereotypes often derive, at least in part, from some underlying reality, and an important reason for addressing the academic performance of athletes as a group is to diminish any basis that may exist for presuming that an offensive lineman is necessarily less interested in doing well in a literature course than a classmate who plays the oboe.

We want to re-emphasize, as we did in the preface to the paperback edition of *The Game of Life,* that we are writing about *policies,* not about people. Students who excel in sports have done absolutely nothing wrong, and they certainly do not deserve to be "demonized" for having followed the signals given to them by coaches, their parents, admissions officers, and admiring fans. In our view, there are real problems with the direction in which college athletics is moving, but attention should be focused on the underlying forces and on the relevant policies, not on the particular individuals caught up in a process not of their own making.[19]

In thinking about the proper rationing of places in academically selective colleges and universities, we also need to think about the rationing of *athletic* opportunity. Another recurring refrain in discussions of trends in athletics is that it is so much harder these days for students with broad interests in academics *and* athletics to be admitted (a question we examine in Chapter 3). Moreover, once such students are admitted, it has become much harder for them to be able to compete. They may be accomplished athletes who want badly to play, but they may lack the raw talent, or may have failed to specialize sufficiently in one sport (or even in playing one position), to win a place on a team that has taken on a "quasi-professional" tone. These may be some of the students for whom the experience of playing intercollegiate sports would be especially valuable, but they may no longer have that opportunity.

We are often asked to speculate on whether the impressive achievements of athletes who attended these colleges and universities in earlier days can be used to predict the after-college outcomes of those being admitted today. In doing the research for this study we have collected new data only on recent matriculants and therefore have no basis for answering this question; it is best left—necessarily—to subsequent research. But it is important to note that the experiences *in college* of the graduates of earlier days contrast in many ways with the experiences of today's athletes; for example, the appearance of systemic underperformance is a relatively recent phenomenon. This we do know, and we also know that, contrary to much popular mythology, how one does in college is of more than passing relevance to how one does later in life.[20] Studying in-college experiences is relevant for this reason, but it is, of course, important primarily as a guide to assessing how well colleges are doing in their most essential task: providing the best possible education for their students.

ORGANIZATION OF THE STUDY

A rough "reader's guide" is implicit in what has already been written. A somewhat more organized outline may nonetheless be useful. This study has three parts. We are concerned with the academic-athletic divide as it exists today (Part A), the more or less inexorable forces that have been widening it (Part B), and what might be done in order to "reclaim the game" (Part C of the study). Following Part C is a brief summary of the study including key findings and recommendations for reform.

Part A, "Athletes on Campus Today," is a blend of descriptive and analytical materials. Throughout we present detailed comparisons of academic outcomes in different sports—with special attention given to dif-

ferences between the so-called High Profile men's sports (football, basketball, and ice hockey), the Lower Profile men's sports (such as soccer, track and field, swimming, and tennis), and women's sports.[21] We also compare outcomes in different conferences and associations, noting in particular the similarities between the Ivy League universities and the NESCAC colleges and the differences between these two conferences (where substantial academic-athletic divides are evident) and the experiences of the UAA universities and the other liberal arts colleges.

The first chapter in this part of the study (Chapter 2) contains a discussion of the evolution of recruiting practices, with special emphasis placed on the roles played by coaches. Chapter 3 discusses admissions policies (including the increasing importance of Early Decision programs) and documents the substantial admissions advantage enjoyed by recruited athletes in most settings. In Chapter 4 we detail the incoming academic credentials and other characteristics of athletes compared with both walk-ons and students at large—examining SAT gaps, socioeconomic backgrounds, attrition from athletics programs, and the effects of athletics programs on campus ethos and campus culture. Chapter 5 presents our findings on the characteristic academic choices made by athletes (fields of study, in particular) and on their academic performance (graduation rates, rank-in-class, and honors). Chapter 6 addresses the endemic problem of academic underperformance by students involved in athletics and examines in detail the factors that may be responsible for it. A key finding is that the time commitments required by athletics can explain only a modest part of the underperformance that is observed; selection criteria (including motivation and priorities) appear to be far more important.

Part B, "Forces Creating the Athletic Divide," begins with a discussion (Chapter 7) of the pronounced differences in outcomes associated with the conferences in which schools compete. The histories of the conferences, which are summarized in the addendum to this introduction, provide the raw materials used to consider the lessons that can be learned about the effects of different kinds of groupings. Chapter 8 summarizes the evidence on the extent of the present-day athletic divide in different settings and how the divide has widened over time. We discuss in detail the broad societal forces internal to athletics that are responsible for what has transpired: increased specialization among athletes, the specialization/professionalization of college coaching, the allure of participation in NCAA national championships, and the rather subtle and complex role of Title IX. We then attempt (Chapter 9) to put the athletic divide in context, first by examining forces from within higher education that have widened it—especially the increasing stratification of higher education, with the most prominent schools (as defined by national rankings) attracting larger and larger numbers of the most academically tal-

ented applicants, and the increasing emphasis on independent work. We conclude with a detailed examination of how the academic-athletic divide for recruited athletes compares with the experiences of minority students and legacies, who also receive special consideration in admissions, and with the experiences of other students (orchestral musicians) who devote large amounts of time to extracurricular activities.

Part C, "The Higher Ground: A Reform Agenda," contains five chapters. Chapter 10 begins with an examination of the benefits of intercollegiate competition and the growing "costs" (mostly non-financial) of the academic-athletic divide. We then list the principles that we believe should guide reform efforts and discuss the need for a nuanced perspective on "winning" and the "pursuit of excellence in all things." Chapter 11 considers ways in which the recruiting-admissions-coaching nexus might be altered within individual institutions and conferences. Chapter 12 continues the discussion of reforms at the institutional/conference level by examining "program definition," by which we mean season length, off-season activities, postseason play and national championships, program scale (including the special case of football), club sports, and possibilities of altering the "athletic culture." Chapter 13 shifts the focus of the discussion to the national level and considers ways in which a new national structure or division (within or without the NCAA) might reinforce reform efforts at the conference level. We conclude (in Chapter 14) by considering the process of achieving change: barriers to be overcome, the importance of leadership from various quarters, and the need to orchestrate a sound process. A recurring theme is that reform needs to be undertaken "holistically," not piecemeal.

STATISTICAL METHODOLOGY AND THE UNDERLYING DATA

This is a data-driven project, and the empirical findings are central to the work. Most of the data used in this book are new and were assembled by the schools participating in this study working in collaboration with The Andrew W. Mellon Foundation. Some parts of the text refer to findings reported in *The Game of Life* or depend on data from the original College and Beyond (C&B) database. More information about such data is available in both *The Game of Life* and *The Shape of the River.* The bulk of the analysis, however, is based on the new data that collectively are referred to in the text and in figures and tables as the "expanded College and Beyond database."

The main set of new data, which consists of detailed records for the cohort of students that entered college in the fall of 1995, was collected for all 33 schools in the study in a way designed to ensure consistency. "Raw"

data for individual students were sent to the Mellon Foundation from the schools, and Foundation staff then checked, cleaned, and organized the data prior to making summary calculations of one kind or another; the anonymity of individuals was carefully protected. Building the data presented in the book in this way—from "the ground up," as it were, by starting with data for individual students—has enormous advantages: it protects against inconsistencies that otherwise might be present if individual institutions calculated their own "averages," and it allows us to combine and analyze the data in any number of different ways.

Records for a total of 27,811 students are included in this part of the analysis. These records include demographic and pre-collegiate information (gender, race, and SAT scores), college grades, fields of study, graduation status and graduation dates, and athletic participation. "Tags" were used to identify students who were on a coach's list that was submitted to the admissions office, a procedure that allowed us to make detailed comparisons of recruited athletes and other students that were not possible in previous studies. We also collected elaborate data indicating the sports in which students participated, the years they played, and whether they participated at junior varsity or varsity level. Some schools were able to provide additional data, such as information on financial aid, graduation honors, and participation in other extracurricular activities.

In addition to the data for the 1995 entering cohort, detailed data on the entire 1999 admissions pool were also assembled so that we could study the probability of admission of recruited athletes and other groups of students. These data were collected early in the study and were not collected for schools added to the project later (in contrast with the records for matriculated students, which we obtained for all schools in the study). Thus these data are available for four of the Ivy League universities, nine of the NESCAC colleges, seven coed liberal arts colleges outside NESCAC, and two women's colleges. These admissions data were taken from 132,301 applications and in general include more limited information than what is available for matriculants: usually SAT scores, recruit status, race or ethnicity, legacy status, and whether an applicant was offered admission.

Finally, records were obtained from the Educational Testing Service (ETS) for 21 of the schools in the study and matched to the institutional records using social security numbers. These records contain both students' testing histories (SAT I and SAT II scores) and students' answers to the questions on the Student Descriptive Questionnaire. The Student Descriptive Questionnaire is completed by students registering for the SAT I and contains information about high school classes and activities, parental education and income, and college plans. This source of data has been particularly useful as a way of identifying high school athletes.

For the most part, the findings presented in this study are simple tabulations, such as the average number of athletes, the percent of athletes who are recruited, the average SAT scores of recruited athletes, percentages of athletes and other students majoring in different fields, and average rank-in-class. Many of these numbers are presented graphically, and still others are in tables or in the text. All averages are "school-weighted." That is, we calculate the measure separately for each school and then average across all schools in the group (such as the Ivies, the NESCAC schools, or the UAA universities). This approach has the advantage of preventing the averages from being dominated by the larger schools.

There are places in the book where, in addition to tabulations, we present the results of regresion analysis. The use of such analysis is described in detail in both *The Game of Life* and *The Shape of the River;* Appendix B in *The Shape of the River,* in particular, gives step-by-step descriptions of regression analysis. The advantage of regression analysis is that it allows us to compare "like with like." Rather than simply comparing the chance of admission or the academic performance of recruited athletes to that of all other students (who may have different academic credentials and so on), regression analysis allows a comparison of the performance of recruited athletes to that of others with the same characteristics.

We employ a fairly sophisticated regression technique to calculate the "adjusted admissions advantage" in Chapter 3. We use separate logistic regressions for men and women at each school that control for SAT scores, minority status, legacy status (where available), and recruit status to predict the probability of admission. A logistic regression is used rather than an ordinary least squares (OLS) regression because admissions decisions are categorical (yes or no). But because the coefficients of a logistic regression are more difficult to interpret than those produced by an OLS regression, we present the results as an "adjusted admissions advantage." We use the coefficients from the logistic regression for each school to estimate the average probability of admission across all applicants to the school as if all applicants were athletic recruits and the average probability of admission across all applicants as if all applicants were not recruits, regardless of the actual recruit status of each applicant. The difference between these two averages is the adjusted admissions advantage (of recruits over other students) for the school; averaging this value for all schools in a group (the Ivy League, NESCAC, etc.) gives us the adjusted admissions advantage for the group. This method is discussed in more detail in Chapter 3, which addresses in particular the somewhat complex question of how to interpret the adjusted admissions advantage and whether (and how) it is affected by "pre-screening" on the part of coaches.

In Chapter 6 we use an OLS regression to compare the academic performance of athletes, those who were recruited and others, to what might

be expected of them on the basis of the academic performance of students at large with similar incoming credentials. The regressions control for race, field of study, individual SAT scores, and the average SAT score of the institution; in this way, they allow us to estimate the effect on academic performance of being a recruited athlete, holding these other factors constant. This basic model is altered slightly to look at specific questions, such as whether athletes on financial aid have particular trouble academically, whether underperformance varies by SAT levels, or whether recruited athletes underperform in years when they are not participating in athletics. One particular technique, discussed in more detail in the chapter, is the use of interaction models. In order to assess the joint impact of, for example, being a recruited athlete and being on financial aid, we use a model that estimates the (additive) effects of being a recruited athlete, being on financial aid, and being both a recruited athlete and on financial aid. The essential purpose of the analysis—which is to compare the academic performance of athletes to that of other students who are similar in relevant respects—remains the same.

In many of the figures in Chapter 6, we show bars designating the 95 percent confidence intervals around the point estimates generated from the regression. One way of thinking about this presentation is that there is a 95 percent chance that actual underperformance falls somewhere on the bar in the figure. If the bar crosses zero, the estimate is "not significant" in the sense that there is more than a 5 percent chance that the true value is equal to or greater than zero (no underperformance). In addition, the bars can be used to determine at least roughly whether separate estimates for two or more groups are statistically different from each other. When two bars on the same graph overlap, the implication is that the estimates are not significantly different; the more the bars overlap, the more likely it is that the true underperformance of the two groups is the same.

In the text we rely mainly on the point estimates, in part for the sake of simplicity. There is, however, also a statistical reason for regarding the point estimates as particularly reliable in this case. Statistical methods of estimating significance assume that one is working with a limited and random sample of an infinite population. Measures such as the 95 percent confidence interval discussed earlier are used to indicate what values of the "true" measure for the underlying population are consistent with the observed estimate from the sample. In this study we are dealing with a finite population—all the freshmen who entered the study schools in the fall of 1995—and we have data on the *entire* population for each of the schools in the study. Thought about this way, whether our findings are "statistically significant" is an irrelevant question. The results we present, such as the average SAT score for recruited female athletes at coed lib-

eral arts colleges or the percent of male athletes in High Profile sports in the bottom third of the class, are not estimates based on a sample from a larger population; they are the actual values for the defined population.

We are, however, interested not only in the freshmen who entered the study schools in the fall of 1995, but in a slightly larger population. We would like the results to generalize to years in the same time frame (1995 was chosen only because it would allow a full five years for students to graduate) or, in the case of the UAA, to the other schools in the association. If the relevant population is more broadly defined—all freshmen entering these and other similar schools in the 1990s, for example—we only have a portion of a finite population. There are methods for adjusting tests of significance when the sample is a known part of a finite population, and these have the effect of making the test for significance "easier to pass." However, we decided to use the traditional methods because they *are* the traditional methods (and thus will be familiar to many readers) and because they will, if anything, *underestimate* the statistical significance of the findings.

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As a former collaborator of one of us (William Baumol) used to say, "The Acknowledgments is where we wash our clean linen in public." In this case, the size of the wash is enormous. No project of this scale could possibly have been completed without the active involvement of a veritable army of colleagues and friends.

We begin by thanking our collaborators, James Shulman, Colin Campbell, Susanne Pichler, and Martin Kurzweil.

James Shulman pioneered work on this subject. He led the building of the C&B database, developed a clear conceptual framework for investigating the ways college sports do and do not comport with educational values, and had the courage (as well as the skill) to raise issues that many did not want to confront. At one point we hoped that James would be a co-author, but his current commitment to create "ARTstor" (a massive electronic database of art images and associated scholarly records) made this unrealistic. Nonetheless, we have benefited more than we can say from his earlier work, his continuing interest in the issues, his wise counsel, and his friendship.

Colin Campbell, who was president of Wesleyan University in the early days of NESCAC, has been a second key ally. We would also have liked Colin to be a co-author had his duties as president of the Colonial Williamsburg Foundation permitted him to assume that role. He was able, nonetheless, to contribute significantly to the framing of this new

study. In addition, he interviewed presidents, faculty, and others on several college campuses and was a thoughtful (and forceful) participant in discussions of the findings and their implications for policy.

Susanne Pichler is the extraordinarily able librarian of the Mellon Foundation. Her work on this project, however, has gone far beyond the contributions that could be expected of a person with such responsibilities. To be sure, Susanne has worked tirelessly to find key reports, articles in campus publications, and other information that we would have missed; she has also assumed full responsibility for checking the accuracy of citations. But she has done much more than that. She has read the manuscript with a keen intelligence, made many substantive suggestions for improvements, and drafted some sections.

Martin Kurzweil joined the Mellon Foundation and began work on the project in the summer of 2002. Martin exemplifies the meaning of the phrase "a quick study." Within days of arriving he had taught himself many of the intricacies of working with the expanded C&B database and—miraculously—made a more or less immediate finding concerning the "macro" relationship between the size of the admissions advantage enjoyed by recruited athletes and the degree of underperformance on various campuses (reported at the end of Chapter 6). Since then he has made many other consequential contributions to the study as well as drafting and editing text, reanalyzing data, and working with those who contributed quotes to be sure their views were represented accurately.

We mention next other colleagues at Mellon who have been important contributors. Cara Nakamura, a research associate in the Foundation's Princeton office, worked with participating institutions to add their institutional records to the expanded C&B database; she also took direct responsibility for gleaning information from the "High Test-Takers Database" that permitted the first estimates of the pool of academically and athletically talented high school students interested in attending the schools in the study (see Chapter 3); finally, she took the lead in working with ETS to link their background information on matriculants at these schools to the expanded C&B database. Susan Anderson, who also works in the Foundation's Princeton office, wrote several valuable background papers, including an informal history of the Academic Index in the Ivy League; in addition, she succeeded in unraveling some of the intricacies of NCAA regulations and in tracing the history of debates within the NCAA over the "non-traditional" season. Pat Woodford, senior administrator in the Foundation's New York office, has done her usual superlative job of keeping track of all the pieces of the puzzle and (working with Martin and Susanne) preparing the manuscript for submission to Princeton University Press. Pat McPherson and Harriet Zuckerman, two senior officers of the Foundation who have spent their lives in the worlds

of the liberal arts colleges and research universities (McPherson as president of Bryn Mawr College for 19 years and Zuckerman as a leading sociologist at Columbia University), read and commented on the entire manuscript and made innumerable suggestions for improving the analysis and the exposition. Lisa Bonifacic, assistant librarian, cheerfully tracked down esoteric references and compiled information that went into a number of the appendix tables.

We decided early on that this study would benefit from much more "texture" than we were able to include in *The Game of Life,* and we were able to enlist four experienced athletic directors to prepare commissioned papers, which we cite frequently in the pages that follow. We learned a great deal from these carefully crafted accounts, replete with personal observations, of subjects such as increasing specialization in athletics and the pros and cons of competing for national championships. These authors also commented extensively on early drafts of the manuscript and saved us from countless errors. For providing such valuable commentary, we thank John Biddiscombe, director of athletics and chair of physical education at Wesleyan University; Amy Campbell, director of athletics and physical education at Bryn Mawr College, formerly a senior associate director of athletics at Princeton University and a coach and administrator at Connecticut College; Robert Malekoff, director of physical education, athletics, and recreation at the College of Wooster, formerly director of physical education and athletics at Connecticut College, associate director of athletics at Harvard University, and a coach and administrator at Princeton University; and Richard Rasmussen, executive secretary of the University Athletic Association. James Litvack, former executive director of the Council of Ivy Group Presidents, also prepared an excellent paper on the history of efforts at reform in the Ivies during his period of service.

We are also indebted to an extremely able group of "vetters," who read the manuscript carefully and with critical eyes. This group includes distinguished social scientists (who were especially helpful in reviewing the statistical methodology and the handling of data), college and university presidents and other senior officers, and faculty members at several of the colleges and universities included in the study. We are able only to list their names, but we hope they know how much we appreciate all of their help: William D. Adams, president, Colby College; Jonathan Cole, professor of sociology and provost, Columbia University; John Emerson, professor of mathematics, Middlebury College; Alan B. Krueger, professor of economics, Princeton University; Richard Levin, professor of economics and president, Yale University; Stephen Lewis, professor of economics and former president, Carleton College; Michael MacDonald, professor of political science, Williams College; Nancy Malkiel, professor

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who arranged visits to their schools and who took time to talk with us candidly about their own experiences, perspectives, and concerns. These interviews were invaluable, and we have cited many of them in the text of this book. In some cases we have quoted individuals by name; in others we have understood and respected preferences for anonymity—which in itself is a commentary on the highly sensitive nature of these issues, and on worries about maintaining friendships and effective working relationships.

Looking back to the creation of the C&B database and now to its extended version, special thanks are due to the institutional researchers and others at the participating colleges and universities who worked so hard to be sure that this research would be based on reliable data, which had to be assembled painstakingly. This group includes Russell Adair, Yale University; Lawrence Baldwin, Wellesley College; Daniel Balik, Macalester College; Elena Bernal, Bryn Mawr College; Becky Brodigan, Middlebury College; Aileen Burdick, Connecticut College; Barbara Carroll, Harvard University; Christine Brooks Cote, Bowdoin College; David Davis–Van Atta, Carleton College; Marne Einarson, Cornell University; William Elliot, Carnegie Mellon University; Richard Fass, Pomona College; James Fergerson, Bates College; Joseph Greenberg, Princeton University; Harrison Gregg, Amherst College; Andrea Habbel, Hamilton College; Andrew Hannah, University of Chicago; David Jones, Colby College; Jean Jordan, Emory University; Bernard Lentz, University of Pennsylvania; Katherine Lewis, Brown University; Larry Litten, Dartmouth College; Lynn McCloskey, Washington University; Richard Myers, Williams College; Brenda Olinski, Smith College; Marian Pagano, Columbia University; Ross Peacock, Oberlin College; Stephen Porter, Wesleyan University; Jacqueline Robbins, Kenyon College; Patricia Ruess, Denison University; Robin Huntington Shores, Swarthmore College; Kent Smith, Trinity College; Dawn Geronimo Terkla, Tufts University; Lew Wyman, Barnard College.

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It is customary to end by excusing all those who talked with us and contributed ideas and criticisms from any responsibility for what we have written and for the conclusions we have reached. We embrace this custom wholeheartedly, since we would regret it greatly if an erroneous attribution of "guilt by association" were to plague any of those who shared ideas with us (including contrarian views). We alone are responsible for the shortcomings of the study. It has been our great pleasure to work together on a fascinating project for which we take "joint and several responsibility."